

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Previously Presented) A data reproduction apparatus for reproducing data recorded in a recording medium, and capable of being connected via an interface bus to a video display apparatus that operates according to software, comprising:

a transmitter that transmits video data and audio data read from the recording medium, using a first area and a second area, respectively, to said video display apparatus via said interface bus; and

a controller that controls said transmitter to transmit, at the time of a software update for said video display apparatus, update software read from the recording medium to said video display apparatus via said interface bus, using a third area for transmission of additional data that is different from said first and second areas, while indicating the software update to said video display apparatus, wherein

said interface bus includes a data line that transmits the video data, the audio data, and the additional data, a clock line that transmits a clock signal, and a control line that transmits a control signal,

said first area is a video period of the video data, and said second and third areas are present in a blanking interval of the video data, and

said transmitter outputs a clock signal to said clock line while transmitting, in synchronization with the clock signal, the update software via the data line using said third area.

2. (Original) The data reproduction apparatus according to claim 1, wherein information related to the software update is further recorded in the recording medium, and

said controller controls, at the time of the software update for said video display apparatus, said transmitter to transmit the related information read from the recording medium to said video display apparatus via said interface bus, using said first area and/or said second area.

3. (Original) The data reproduction apparatus according to claim 2, wherein said related information includes audio data, and

said controller controls said transmitter, at the time of the software update for said video display apparatus, to transmit the audio data in said related information read from the recording medium to said video display apparatus via said interface bus, using said second area,.

4. (Original) The data reproduction apparatus according to claim 2, wherein said related information includes video data, and

said controller controls said transmitter, at the time of the software update for said video display apparatus, to transmit the video data in said related information read from the recording medium to said video display apparatus via said interface bus, using said first area.

5. (Original) The data reproduction apparatus according to claim 2, wherein said related information includes operational guide information representing an operational procedure for the software update.

6. (Canceled)

7. (Original) The data reproduction apparatus according to claim 1, wherein said update software includes identification information for identifying an object whose software should be updated, and
said controller indicates a software update to said video display apparatus based on said identification information.

8. (Original) The data reproduction apparatus according to claim 7, further comprising a storage device that stores software for said controller, wherein
said controller indicates a software update to said video display apparatus when said identification information represents said video display apparatus, and updates the software stored in said storage device, using the update software read from the recording medium, when said identification information represents a software update for said controller.

9. (Currently Amended) A video display apparatus capable of being connected to a data reproduction apparatus via an interface bus, wherein

said interface bus includes a data line that transmits video data, audio data, and additional data using a first area, a second area and a third area, respectively, a clock line that transmits a clock signal, and a control line that transmits a control signal, and

said first area is a video period of the video data, and said second and third areas are present in a blanking interval of the video data,

said video display apparatus comprising:

a receiver that receives the video data and the audio data transmitted by said data reproduction apparatus via said interface bus, using said first area and said second area, respectively, and receives update software transmitted in synchronization with the clock signal output to said clock line by said data reproduction apparatus, using said third area other than said first and second areas;

an audio output unit that outputs a sound based on the audio data received by said receiver;

a video display unit that displays an image based on the video data received by said receiver;

a processor that controls said video display unit and said audio output unit; and

a storage that stores software for said processor, wherein

said processor updates, upon reception of the update software transmitted via said interface bus using said third area by said receiver, and indication of a software update by said data reproduction apparatus, the software stored in said storage using the update software received by said receiver.

10. (Original) The video display apparatus according to claim 9, wherein

said processor controls said receiver to receive information related to the software update that is transmitted via said interface bus using said first area and/or said second area, and causes said video display unit to display an image and said audio output unit to output a sound, based on the related information received by said receiver.

11. (Original) The video display apparatus according to claim 9, further comprising:

an expansion function unit that implements an expansion function;

another processor that controls said expansion function unit; and

another storage that stores software for said processor for said expansion function,

wherein

said processor transmits, upon indication of a software update for said other processor by said data reproduction apparatus, the update software received by said receiver to said other processor while indicating the software update for said other processor, and

said other processor updates the software stored in said other storage according to the indication by said processor, using the update software transmitted from said processor.

12. (Currently Amended) A software updating system comprising:

a video display apparatus that operates according to software; and

a data reproduction apparatus for reproducing data recorded in a recording medium, and capable of being connected to said video display apparatus via an interface bus, wherein

said data reproduction apparatus includes:

a transmitter that transmits video data and ~~the~~ audio data read from the recording medium, using a first area and a second area, respectively, to said video display apparatus via said interface bus; and

a controller that controls said transmitter to transmit, at the time of a software update for said video display apparatus, update software read from the recording medium to said video display apparatus via said interface bus, using a third area for transmission of additional data other than said first and second areas, while indicating the software update to said video display apparatus, wherein

said interface bus includes a data line that transmits the video data, the audio data, and the additional data, a clock line that transmits a clock signal, and a control line that transmits a control signal,

said first area is a video period of the video data, and said second and third areas are present in a blanking interval of the video data, and

said transmitter outputs a clock signal to said clock line while transmitting, in synchronization with the clock signal, the update software via the data line using said third area, wherein

said video display apparatus comprises:

a receiver that receives the video data and audio data transmitted by said data reproduction apparatus via said interface bus using said first area and said second area, respectively;

an audio output unit that outputs a sound based on the audio data received by said receiver;

a video display unit that displays an image based on the video data received by said receiver;

a processor that controls said video display unit and said audio output unit; and

a storage that stores software for said processor, wherein

said processor updates, upon reception of the update software by said receiver that is transmitted via said interface bus using the third area for transmission of the additional data, and indication of the software update by said data reproduction apparatus, the software stored in said storage using the update software received by said receiver.

13. (Original) The software updating system according to claim 12, wherein said video display apparatus includes a television receiver.

14. (Amended) A software updating method for updating software for a video display apparatus using a data reproduction apparatus for reproducing data recorded in a recording medium, and capable of being connected to said video display apparatus via an interface bus, comprising the steps of:

transmitting, at the time of a software update for said video display apparatus, update software read by said data reproduction apparatus from the recording medium to

said video display apparatus via said interface bus, using a third area for transmission of additional data other than a first area for transmission of video data and a second area for transmission of audio data;

indicating the software update to said video display apparatus by said data reproduction apparatus;

receiving by said video display apparatus, upon indication of the software update by said data reproduction apparatus to said video display apparatus, the update software transmitted via said interface bus using said third area; and

updating the software for said video display apparatus using said received update software, wherein

said interface bus includes a data line that transmits the video data, the audio data, and the additional data, a clock line that transmits a clock signal, and a control line that transmits a control signal,

said first area is a video period of the video data, and said second and third areas are present in a blanking interval of the video data, and

~~said step of transmitting includes the step of~~ the update software comprises outputting the clock signal to said clock line while transmitting, in synchronization with the clock signal, the update software via the data line using said third area.